

SUPPORT FOR THE AMENDMENTS

Claims 2, 21, and 65 are canceled herein.

Claims 1, 4-9, 15, 16, 22, 25, 27, and 30 has been amended.

Claim 67 has been added.

The amendment to Claim 1 is supported by the specification, for example, at page 7, lines 18-23, page 8, lines 12-15, and page 8, lines 17-21. The amendment to Claims 4, 15, 16, 22, 25, 27, and 30 and new Claim 67 are supported by the specification, for example, at page 9, line 6 and page 10, lines 4-31. Claims 4-9 have been amended to replace "SEQ ID No:" with "SEQ ID NO:".

No new matter has been added by the present amendments.

REMARKS

Claims 1, 3-20, 22-64, 66, and 67 are pending in the present application.

The objections to the specification and the claims are obviated by amendment. Applicants have amended the specification and claims to address the Examiner's points of criticism appearing on page 3 of the Office Action mailed August 5, 2009. Withdrawal of these grounds of objection is requested.

The rejection of Claims 1-9, 15, 16, 20, 21, and 65 under 35 U.S.C. §112, second paragraph, are believed to be obviated by amendment.

Applicants make no statement with respect to the propriety of these grounds of rejection and in now way acquiesce to the same. Solely to expedite examination of this application, Applicants have amended the claims to address the Examiner's criticisms. Specifically, Applicants have amended the claims to specifically define the terms "maturation product", "peptide deriviative", "derivative" and "mimetic". The term "modulatory" has been replaced with the term "inhibitory" in Claim 1, which previously was set forth in Claim 2. And, Claim 4 now specifies that X2 represents Gln when X1 is Cys.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 21 and 65 under 35 U.S.C. §112, first paragraph (enablement), is obviated by amendment.

Applicants make no statement with respect to the propriety of these grounds of rejection and in now way acquiesce to the same. Solely to expedite examination of this

application, Applicants have canceled Claims 21 and 65. Thus, this ground of rejection is now moot.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 1-3, 15, 16, 20, 21, and 65 under 35 U.S.C. §112, first paragraph (written description), is obviated in part by amendment and traversed in part.

Applicants make no statement with respect to the propriety of these grounds of rejection as applied to the original claims and in now way acquiesce to the same. Solely to expedite examination of this application, Applicants have amended the claims to structurally define the claimed peptides and the claimed peptide derivatives. More specifically, Claim 1 has been amended to specify the minimal length of the peptide (3-15 amino acids) as well as its sequence (obtained from BPLP). Indeed, it is necessarily a fragment of the BPLP protein that is obtained by cleavage of the BPLP protein precursor by furin, a PC convertase, or PACE 4.

Amended Claim 1 further specifies that the peptide derivative does not comprise more than two substitutions compared to the peptide and that it retains binding specificity and/or physiological activity of the peptide.

Amendment Claims 15 and 16 specify the biological activity of the mimetic and the structural modifications by which the mimetic can be obtained.

Applicants submit that the skilled artisan would readily obtain the claimed peptides by cleavage of the BPLP protein precursor by an enzyme selected from furin, a PC convertase, or PACE 4. The artisan would also readily envision and be able to produce the peptide derivatives by introducing one or two substitutions into the sequence of the peptide thus obtained. In addition, the artisan would also readily envision and be able to produce

mimetics by introducing one of the structural modifications recited in the claims.

Verification of the resultant peptides, peptide derivatives, and mimetics that inhibit metalloectopeptidases can be readily attained by employing the assay described in Example 4 at pages 45-47 of the specification.

Accordingly, the specification as filed fully describes the claimed peptides, peptide derivatives, and mimetics, their functional characteristics and methods of making the same. Thus, Applicants submit that the written description requirement of 35 U.S.C. §112, first paragraph, is satisfied.

Further with respect to Claim 20, Applicants submit that the specification as filed clearly defines the term "BPLP protein" as being a 201 amino acid-long sequence of SEQ ID NO: 2 (see page 5, lines 27-32). In addition the designation of BPLP is known in the art (see, for example, Dickinson et al). Thus, Applicants submit that the skilled artisan would immediately understand that the term BPLP protein refers to the protein of SEQ ID NO: 2.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 1-4, 6, 15, 16, and 20 under 35 U.S.C. §102(b) over Dickinson et al is obviated by amendment.

Applicants make no statement with respect to the propriety of these grounds of rejection and in now way acquiesce to the same. Solely to expedite examination of this application, Applicants have amended Claim 1 to specify that the peptide according to the present invention is obtained by cleavage of the BPLP protein precursor by furin, a PC convertase, or PACE 4. The mature form of BPLP, obtained through cleavage of the signal peptide by a signal peptidase, is therefore excluded from the scope of the peptides of the


present invention. As such, Dickinson et al do not affect the patentability of the claimed invention.

Withdrawal of this ground of rejection is requested.

Applicants submit that the present application is in condition for allowance. Early notification to this effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Vincent K. Shier, Ph.D.
Registration No. 50,552

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/03)